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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/825,267	04/03/2001	Michael A. Blatchley	9086/104	2082

48733 7590 10/13/2006

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EXAMINER

STEVENS, THOMAS H

ART UNIT PAPER NUMBER

2123

DATE MAILED: 10/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/825,267	<b>Applicant(s)</b> BLATCHLEY ET AL.	
	<b>Examiner</b> Thomas H. Stevens	<b>Art Unit</b> 2123	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 April 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 and 18-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 19-24 is/are rejected.
- 7) ☒ Claim(s) 18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. <u>    </u> |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)                              |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/22/02 &amp; 5/24/01</u> . | 6) <input type="checkbox"/> Other: _____   |

## **DETAILED ACTION**

### ***Claim Renumbering***

1. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

The Office recommends the applicants provide a clean copy of the actual pending claims based upon renumbering.

2. Claims 12-17 are cancelled by amendment. New claims presented as 12-18 have been renumbered in accordance to rule 1.126 as 18-24.

3. Claims 1-11 and 18-24 were examined.

### ***Claim Objections***

4. The examiner has provided a number of examples of claim deficiencies denoting possible antecedent issue; however, this list may not be inclusive. Applicant should refer to theses as examples and should initiate all necessary corrections.

- Claim 1, line 5; change "the reading" to "a reading"
- Claim 1, lines 5-6, change "the geometric area" to "a geometric area"
- Claim 1, line 8, change "the amount" to "an amount"
- Claim 2, line 5; replace "as they" with the word "to"

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- Claim 2, line 4, replace "The combined geometric area" to "a combined geometric area "
- Claim 3, line 4, replace "The combined geometric
- Claim 3, line5, replace "as they" with the word "to"
- Claim 4, line 3; replace "said tape speed" with "a tape speed"
- Claim 5, line 2, replace "said alternative tape" to "an alternative tape"
- Claim 6, line 3, replace "said gap width" to "varying gap width"
- Claim 7, line 3; replace "said head offset spacing" with "a head offset spacing"
- Claim 8, line 9, replace "the amount" to "an amount"
- Claim 8, line 11, replace "the amount" to "an amount"
- Claim 10, line 2, replace "said alternative tape" to "an alternative tape"
- Claim 11, line 3; replace "said gap width" with "a gap width"
- Claim 18, line 5, replace "the reading" with "a reading"
- Claim 18, line 6, replace "the geometric area" with "a geometric area"
- Claim 18, line 8, replace "the amount" with " an amount"
- Claim 19, line 4, replace "the combined geometric area" with "a combined geometric area"

All claims have been treated on their merits as best understood by the examiner.

### ***Specification Objections***

5. The disclosure is objected to because of the following informalities:

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- Page 1, line 4, after "09/176,079" insert -- now U.S. Patent 6,307,701 --.
- Page 1, line 8, after "09/176,015" insert -- now U.S. Patent 6,381,706 --.
- Page 1, line 12, after "09/176,014" insert -- now U.S. Patent 6,367,047 --.
- The terms "like azimuth" (e.g., page 6, line 7) and "unlike azimuth" (e.g., page 10, line 15) are unclear within the context of the written description. Applicants need to review the disclosure of where this term is used.
- Typographical error (page, 14, line 25): the word "he" should be replaced with "the".

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-11 and 19-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. Claim 1 recites the limitation "the amount of overlap" in line 8. There is insufficient antecedent basis for this limitation in the claim.

9. Claim 19 recites the limitation "the geometric area" in line 4; "the read simulation element" in line 3; "the coverage determination" in line 6; and "the amount of overlap" lines 6-7. There is insufficient antecedent basis for this limitation in the claim.

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10. Claim 20 recites the limitation "the read simulation element" in line 3; "the reading" in line 3; "the coverage determination" in line 6; "the combined geometric area" in line 4; and "the amount of overlap" in line 6-7. There is insufficient antecedent basis for this limitation in the claim.

11. Claim 21 recites the limitation "the read simulation element" in line 3; "the reading" in line 3; "the coverage determination" in line 6; "the amount of overlap" in line 6-7; and "the area" in line 6. There is insufficient antecedent basis for this limitation in the claim.

12. Claim 22 recites the limitation "the nominal speed" in line 6-7. There is insufficient antecedent basis for this limitation in the claim.

13. Claim 23 recites the limitation "the read simulation" in line 3; "the coverage determination" in line 6; and "for said alternate gap" in line 7. There is insufficient antecedent basis for this limitation in the claim.

14. Claim 24 recites the limitation "the coverage determination" in line 6; "the amount of overlap" in line 6; "the area defined" in line 7; and "said alternate head offset". There is insufficient antecedent basis for this limitation in the claim.

### ***Section II: Allowance***

15. Claims 1-11 and 19-24 are an indication of allowable subject matter.

16. As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

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17. Claims 1-11 and 19-24 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

18. The following is a statement of reasons for the indication of allowable subject matter: While US Patent 5,448,439 teaches (claim 1) method for evaluating parameters of a drum design for use in a helical scan tape device comprising the steps of: (claims 1 and 8) (a) receiving said parameters wherein said parameters include position of a first read head on said drum; (e) repeating steps (b) through (d) for each of said plurality of tracks; (claim 8) (b) simulating the reading of one track of a plurality of tracks by calculating a first geometric area said first read head would cover as it scans over said track of predetermined dimensions and by calculating a second geometric area said second read head would cover as it scans over said track;

*(claims 1 and 8) "(b) simulating the reading of one track of a plurality of tracks by calculating the geometric area said first read head would cover as it scans over said track of predetermined dimensions; (c) determining the amount of overlap of said geometric area as a percentage of the area defined by said predetermined dimensions of said track; (d) determining that the simulated read is successful when said percentage is greater than a predetermined coverage threshold value; a method of determine whether parameter are effective for a drum design when a plurality of tracks was simulated for a predetermined threshold... and (i) determining that said parameters are effective for a drum design when a number of said plurality of tracks for which the*

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*simulated read was determined to be successful is greater than a predetermined error rate threshold value; an approximate model for simulating head-to-head spacing in helical scan video tape recording;*

in combination with the remaining elements and features of the claimed invention. It is for these reasons that the applicants' invention defines over the prior art of record.

19. Claim 18 is allowed.

20. As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

21. The following is an examiner's statement of reasons for allowance:

While US Patent 5,448,439 teaches (claim18) (a) receiving said parameters wherein said parameters include a position of a first read head on said drum and a position of a second read head on said drum; (b) simulating the reading of one track of a plurality of tracks by calculating a first geometric area said first read head would cover as it scans over said track of predetermined dimensions and by calculating a second geometric area said second read head would cover as it scans over said track;

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*(claim 18) " a drum evaluation simulator...a parameter receiving element... a read simulation element for simulating the reading of one track...a coverage determination element"*

in combination with the remaining elements and features of the claimed invention. It is for these reasons that the applicants' invention defines over the prior art of record.

22. Any comments considered necessary by applicant must be submitted no later than the payment of issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statements or Reasons for Allowance".

### ***Correspondence Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mr. Tom Stevens whose telephone number is 571-272-3715, Monday-Friday (8:00 am- 4:30 pm EST).

If attempts to reach the examiner by telephone are unsuccessful, please contact examiner's supervisor Mr. Paul Rodriguez 571-272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published

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applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>.. Answers to questions regarding access to the Private PAIR system, contact the Electronic Business Center (EBC) (toll-free (866-217-9197)).

August 24, 2006

TS

 7/20/06  
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